

ABSTRACT OF THE DISCLOSURE

An electronic ballast for driving at least one gas discharge lamp from a source of AC power which has a substantially sinusoidal line voltage at a given line frequency includes a rectifying circuit; a valley fill circuit; and an inverter circuit connectable to the at least one gas discharge lamp. The inverter circuit has a single controllably conductive device and an inductor; the inductor connectable to the at least one gas discharge lamp; the inverter circuit being adapted to draw current from the source of AC power whereby the total current drawn from the source of AC power has a total harmonic distortion below about 33.3%; and whereby the lamp current has a current crest factor below about 2.1.

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